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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/652,675	08/29/2003	Randy Jon Logan	758.1099US01	2545
23552	7590	02/22/2005	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			TUPPER, ROBERT S	
			ART UNIT	PAPER NUMBER
			2652	

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/652,675	Applicant(s) LOGAN, RANDY JON	
	Examiner Robert S Tupper	Art Unit 2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 August 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 9-21 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the following claimed features ; "at least one aperture" (claims 1, 14, and 17), "an outlet port" (claims 1, 14, and 17), and "a porous support layer **disposed within the interior volume**" (claim 13) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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2. The disclosure is objected to because of the following informalities: the specification does not clearly deal with the claimed "at least one aperture" (claims 1, 14, and 17), "an outlet port" (claims 1, 14, and 17), and "a porous support layer **disposed within the interior volume**" (claim 13).

Appropriate correction is required.

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

On lines 1-2, "disposed within the interior volume" is indefinite. The position of this element with relation to the other listed elements is not clearly set forth.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-6, 9, 12, and 14-21 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by VOIGHTS (6,266,208).

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Note figures 1, 2, 10, and 11. VOIGHTS shows an integrated filter used in a disk drive. The integrated filter includes recirculation, chemical, and breather filters. The integrated filter structure has a housing (12) with a base (18), top (34,36) and a sidewall (30,32). There are first (24) and second (26) chambers. There is an aperture (35) in the sidewall into the first chamber (24). There is an adsorbent media (14) in the first chamber, and a filter media (22) in the second chamber. The second chamber includes an inlet port (46), an outlet port (not numbered but the opening in the sidewall that exposes the filter element 22). , The first chamber is closest to the disk and thus in a region of higher pressure (re claims 2, 18, and 19). There is a diffusion channel (42) leading into the second chamber (re claim 5). The housing is clearly non-porous (re claim 6). There can be adhesive on the base (see column 4 lines 44-45) (re claim 9). The first and second chambers are separated by an internal wall (28) (re claim 12). The first chamber is closer to the disk and thus "faces" the disk (re claim 15). The second chamber is below the first chamber and more remote from the disk and thus "faces opposite" to the disk (re claim 16).

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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8. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over VOIGHTS (6,266,208) in view of VOIGHTS (6,208,484).

VOIGHTS ('208) discloses a combination disk drive filter substantially as claimed. VOIGHTS ('208) differs in not specifying the exact filter material.

The listed filter materials are well known and commonly used in disk drive filtering. VOIGHTS ('484) discloses the use of carbon or silica gel for filter materials in combination disk drive filters.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the listed materials for the filter in VOIGHTS ('208). The motivation is as follows: VOIGHTS simply did not specify any filter materials. One of ordinary skill in the art would use any such known materials where none were specified.

9. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach or suggest the use of a porous membrane over the outlet port in addition to the filter media in the filter structure set forth in claim 1.

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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DAUBER and AZARIAN et al are cited for further showings of combination filters in disk drives. Both also further disclose that the specific filter materials claimed are known.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert S Tupper whose telephone number is 703-308-1601. The examiner can normally be reached on Mon - Fri, 6:00 AM - 3:30 PM (first Fri off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on 703-305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robert S Tupper
Primary Examiner
Art Unit 2652

rst